

REMARKS

The following remarks are prepared in response to the Office Action of June 4, 2004. Claims 1, 2, 5-12, 14-17, 20, 23, 25, and 28 are to be pending in this application, after entry of this amendment.

Claims 5-12, 16, 17, 23, and 28 stand allowed and claims 3, 4, 13, 18, 19, 21, 22, 24, 26, 27, and 29 have been canceled. Claims 1, 2, 14, 15, 20, and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Awamoto ("Awamoto", U.S. Patent No. 5,898,414) in view of Tajima ("Tajima", EP 0945844). The remaining rejections are moot in view of the canceled claims.

Claims 5-12, 23 and 28

Applicants appreciate the indication from the Examiner that claims 5-12, 16, 17, 23, and 28 are allowed.

Claims 1, 2, 14, 15, 20, and 25

Claims 1 and 2 have been amended to recite an image changing unit for sequentially scanning cells adjacent in the second direction which is the vertical direction when driving the panel. The Examiner acknowledges the inadequacy of Awamoto to disclose an image changing unit that changes a part of the subfield image data so that a total number of charges and discharges performed on a first electrode when writing becomes smaller. The Examiner, however, attempts to overcome such inadequacy by employing Tajima's concept of achieving smaller charges and discharges by teaching a method of driving displays comprising a sequence changing unit for changing a sequence of scanning electrodes to minimize power consumption associated with charging and discharging the electrodes.

Tajima aims to decrease the driving power of the first electrode by reducing changes in voltage waveform applied to the first electrode and thereby lessening the number of times the first electrode is charged/discharged. To do so, Tajima changes the order of scanning lines of display electrodes so that the ON state or the OFF state continues as much as possible. Hence, Tajima performs selective scanning instead of sequential scanning and requires a dedicated, complex arithmetic circuit to determine the order in which the lines are selected.

By contrast, the invention as recited in claims 1 and 2 includes an image changing unit for sequentially scanning cells adjacent in the second direction which is the vertical direction when driving the panel. That is, the invention sequentially scans the display electrode lines (pairs of display electrodes) from top to bottom on the screen, to write the sub-field image data.

Thus, Tajima fails to disclose an image changing unit for sequentially scanning cells adjacent in the second direction which is the vertical direction when driving the panel. Therefore, Awamoto in combination with Tajima, is devoid of any teaching or suggestion at all of an image changing unit including the claimed features. Accordingly, the rejection of claims 1 and 2 should therefore be withdrawn.

Claims 14, 15, 20, and 25 all depend from independent claims 1, 2 and/or 5. All of these dependent claims define the image display device with greater particularity and thus further distinguish over Awamoto, Tajima, and the other references of record. For this reason, and for the reasons set forth above with respect to independent claims 1 and 2, the rejection of these dependent claims should be withdrawn.

The other references of record have been reviewed in this case and do not disclose, teach or suggest the present invention as recited by the claims either individually or in any combination.

Conclusion

In view of the above remarks, Applicants believe that all the rejected claims are now in condition for allowance and respectfully requests that they be allowed. With all claims in the application allowed, Applicants respectfully request that the application be passed to issue.

If the Examiner believes an interview would be helpful to advance this case, he is invited to contact the undersigned attorney.

Authorization is hereby given to charge our Deposit Account No. 19-2814 for any charges that may be due. Furthermore, if any additional extension is required, then Applicants hereby request such an extension.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on October 4, 2004.

By: Rachel Carter

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Signature

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Very truly yours,

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